

IN THE CLAIMS:

1. (Currently Amended) A system for authentication, comprising:
a processor circuit having a processor and a memory; and
an authentication system stored in the memory and executable by the
processor, the authentication system comprising:

a plurality of authentication agents, each of the authentication
agents authenticating at least one user parameter by performing at least one
authentication task; ~~and~~

an authentication manager that requests each of the authentication
agents to authenticate an unauthenticated user parameter until all of the
authentication agents have been requested to authenticate the unauthenticated
user parameter and the authenticated user parameter is authenticated by at least
one of the authentication agents, unless one of the authentication agents fails to
authenticate the unauthenticated user parameter; ~~and~~

wherein the unauthenticated user parameter that all of the
authentication agents are requested to authenticate is identical for each of the
authentication agents; and

wherein each authentication agent is configured to indicate to the
authentication manager that the authentication agent has authenticated the
unauthenticated user parameter even though the authentication agent is not
configured to perform a respective authentication task that is necessary to
authenticate the unauthenticated user parameter.

2. (Previously Presented) The system of claim 1, wherein the authentication
manager waits for a response from each of the authentication agents, each response
indicating whether the unauthenticated user parameter has been authenticated.

3. (Previously Presented) The system of claim 1, comprising:
an external authentication service; and
wherein at least one of the authentication agents calls upon the external authentication service to authenticate the unauthenticated user parameter.

4. (Canceled)

5. (Currently Amended) A system for authentication, comprising:
a processor circuit having a processor and a memory; and
an authentication system stored in the memory and executable by the
processor, the authentication system comprising:

a plurality of authentication agents, each of the authentication
agents authenticating at least one user parameter by performing at least one
authentication task, wherein a parameter type associated with each of the
authentication agents; ~~and~~

an authentication manager that requests each of the authentication
agents to authenticate an unauthenticated user parameter, wherein the
unauthenticated user parameter that all of the authentication agents are
requested to authenticate is identical for each of the authentication agents; and

wherein each of the authentication agents authenticates the
unauthenticated user parameter if the unauthenticated user parameter is of the
parameter type associated with the respective authentication agent; and

wherein:

each of the authentication agents transmits an invalid
response to the authentication manager upon a failure to authenticate the
unauthenticated user parameter;

each of the authentication agents transmits a valid response
to the authentication manager upon a successful authentication of the
unauthenticated user parameter; and

each of the authentication agents transmits a valid response
to the authentication manager that indicates to the authentication manager
that the authentication agent has authenticated the unauthenticated user
parameter even though the authentication agent is not configured to
perform a respective authentication task that is necessary to authenticate
the unauthenticated user parameter. if the unauthenticated user
parameter is of a parameter type that is different than the parameter type
associated with the respective authentication agent.

6. (Previously Presented) The system of claim 1, wherein:

each of the authentication agents transmits an invalid response to the authentication manager upon a failure to authenticate the unauthenticated user parameter; and

each of the authentication agents transmits a valid response to the authentication manager if the unauthenticated user parameter is successfully authenticated.

7. (Currently Amended) A system for authentication, comprising:

a processor circuit having a processor and a memory; and

an authentication system stored in the memory and executable by the processor, the authentication system comprising:

a plurality of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task;

an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter, wherein the unauthenticated user parameter that all of the authentication agents are requested to authenticate is identical for each of the authentication agents; ~~and~~

wherein, upon startup, the authentication manager is unaware of how many of the authentication agents exist in association with the authentication system and the authentication manager discovers the authentication agents; and

wherein each authentication agent is configured to indicate to the authentication manager that the authentication agent has authenticated the unauthenticated user parameter even though the authentication agent is not configured to perform a respective authentication task that is necessary to authenticate the unauthenticated user parameter.

8. (Previously Presented) The system of claim 7, wherein the authentication manager is configured to generate a lookup table listing each of the authentication agents during startup after the authentication agents are discovered.

9. (Currently Amended) An authentication method, comprising:
executing a plurality of authentication agents in a computer system, each of the authentication agents being configured to perform at least one authentication task; and

sequentially requesting each of the authentication agents to authenticate an unauthenticated user parameter input into the computer system until all of the authentication agents have been requested to authenticate the unauthenticated user parameter and the authenticated user parameter is authenticated by at least one of the authentication agents, unless one of the authentication agents fails to authenticate the unauthenticated user parameter, wherein the unauthenticated user parameter that all of the authentication agents are requested to authenticate is identical for each of the authentication agents; and

generating an indication in each authentication agent that is sent to the authentication manager that indicates to the authentication manager that the authentication agent has authenticated the unauthenticated user parameter even though the authentication agent is not configured to perform a respective authentication task that is necessary to authenticate the unauthenticated user parameter.

10. (Original) The authentication method of claim 9, comprising requesting an external authentication service to authenticate the at least one user parameter.

11. (Canceled)

12. (Currently Amended) An authentication method, comprising:

executing a plurality of authentication agents in a computer system, each of the authentication agents being configured to perform at least one authentication task;

executing an authentication manager in the computer system to sequentially request each of the authentication agents to authenticate an unauthenticated user parameter input into the computer system, wherein the unauthenticated user parameter that all of the authentication agents are requested to authenticate is identical for each of the authentication agents;

transmitting an invalid response from at least one of the authentication agents to the authentication manager upon a failure to authenticate a respective user parameter;

transmitting a valid response from at least one of the authentication agents to the authentication manager upon a successful authentication of the unauthenticated user parameter; and

transmitting the valid response from at least one of the authentication agents to the authentication manager that indicates to the authentication manager that the authentication agent has authenticated the unauthenticated user parameter even though the authentication agent is not configured to perform a respective authentication task that is necessary to authenticate the unauthenticated user parameter, if the unauthenticated parameter is of a parameter type that is different than the parameter type associated with the respective authentication agent.

13. (Original) The authentication method of claim 9, further comprising:

transmitting an invalid response to the authentication manager upon a failure to authenticate the unauthenticated user parameter; and

transmitting a valid response to the authentication manager if the unauthenticated user parameter is successfully authenticated.

14. (Currently Amended) An authentication method, comprising:

executing a plurality of authentication agents in a computer system, each of the authentication agents being configured to perform at least one authentication task;

executing an authentication manager in the computer system, wherein the authentication manager is unaware of how many of the authentication agents exist when the authentication manager is first executed;

discovering the authentication agents with the authentication manager upon execution of the authentication manager;

employing the authentication manager to sequentially request each of the authentication agents to authenticate an unauthenticated user parameter input into the computer system, wherein the unauthenticated user parameter that all of the authentication agents are requested to authenticate is identical for each of the authentication agents; and

obtaining a response from each of the authentication agents indicating whether the unauthenticated user parameter has been authenticated, wherein each authentication agent is configured to indicate to the authentication manager that the authentication agent has authenticated the unauthenticated user parameter even though the authentication agent is not configured to perform a respective authentication task that is necessary to authenticate the unauthenticated user parameter.

15. (Previously Presented) The authentication method of claim 14, further comprising employing the authentication manager to generate a lookup table listing each of the authentication agents after the authentication agents are discovered upon execution of the authentication manager.

16. (Currently Amended) A computer program embodied on a computer readable medium and executable by a computer system for performing authentication, comprising:

code that embodies a plurality of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task; ~~and~~

code that embodies an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter until all of the authentication agents have been requested to authenticate the unauthenticated user parameter and the authenticated user parameter is authenticated by at least one of the authentication agents, unless one of the authentication agents fails to authenticate the unauthenticated user parameter, wherein the unauthenticated user parameter that all of the authentication agents are requested to authenticate is identical for each of the authentication agents; and

wherein each authentication agent is configured to indicate to the authentication manager that the authentication agent has authenticated the unauthenticated user parameter even though the authentication agent is not configured to perform a respective authentication task that is necessary to authenticate the unauthenticated user parameter.

17. (Previously Presented) The computer program embodied on a computer readable medium and executable by the computer system of claim 16, wherein the authentication manager further comprises code that waits for a response from each of the authentication agents, each response indicating whether the unauthenticated user parameter has been authenticated.

18. (Previously Presented) The computer program embodied on a computer readable medium and executable by the computer system of claim 16, wherein at least one of the authentication agents further comprises code that calls upon an external authentication service to authenticate the unauthenticated user parameter.

19. (Canceled)

20. (Currently Amended) A computer program embodied on a computer readable medium and executable by a computer system for performing authentication, comprising:

code that embodies a number of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task;

code that embodies an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter, wherein the unauthenticated user parameter that all of the authentication agents are requested to authenticate is identical for each of the authentication agents; and

wherein each of the authentication agents further comprises:

code that transmits an invalid response to the authentication manager upon a failure to authenticate the unauthenticated user parameter;

code that transmits a valid response to the authentication manager upon a successful authentication of the unauthenticated user parameter; and

code that transmits a valid response to the authentication manager that indicates to the authentication manager that the authentication agent has authenticated the unauthenticated user parameter even though the authentication agent is not configured to perform a respective authentication task that is necessary to authenticate the unauthenticated user parameter. ~~if the unauthenticated user parameter is of a parameter type that is different than the parameter type associated with the respective authentication agent.~~

21. (Previously Presented) The computer program embodied on a computer readable medium and executable by the computer system of claim 16, wherein each of the authentication agents further comprise:

code that transmits an invalid response to the authentication manager upon a failure to authenticate the unauthenticated user parameter; and

code that transmits a valid response to the authentication manager if the unauthenticated user parameter is successfully authenticated.

22. (Currently Amended) A computer program embodied on a computer readable medium and executable by a computer system for performing authentication, comprising:

code that embodies a number of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task; ~~and~~

code that embodies an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter, wherein the unauthenticated user parameter that all of the authentication agents are requested to authenticate is identical for each of the authentication agents; ~~and~~

wherein the authentication manager further comprises code that discovers the authentication agents upon an initial execution of the authentication manager, the authentication manager being unaware at the time of initial execution of how many of the authentication agents exist that may be requested by the authentication manager to authenticate the unauthenticated user parameter; and

wherein each authentication agent further comprises code that indicates to the authentication manager that the authentication agent has authenticated the unauthenticated user parameter even though the authentication agent is not configured to perform a respective authentication task that is necessary to authenticate the unauthenticated user parameter.

23. (Previously Presented) The computer program embodied on a computer readable medium and executable by the computer system of claim 22, wherein the authentication manager further comprises code that generates a lookup table listing each of the authentication agents after initial execution after the authentication agents are discovered.